

Central Washington University

Course title and number: Math 1149-173-001: Calculus II

Course offered: Fall 2014.

Credits: 5 credit hours

Instructor contact information: Dr. Frank Underdown Jr.; Cell# 509-989-5533 (please, no call after 9:00 pm); email:Contact me through CANVAS

Course time & place: MoTuWeThFr, 9:00am-9:50am, Hertz Hall 105

Note: I will upload course materials to Canvas (Homework problems, solutions, etc. You will also be able to communicate with me via Canvas.

Office: Black Hall

Office hours:

Textbook: Calculus: Single and Multivariable, 6th Ed., Hughes-Hallett

Course Content: Chapters 5, 6, 7 and 8 of the text

Equipment: Scientific calculator and computer

CATALOG DESCRIPTION: Theory, techniques and applications of differentiation and integration of the elementary functions.

PREREQUISITE: MATH 172 Calculus I or permission

Measurable learning objectives:

- 1) Think Critically
- 2) Reason quantitatively and symbolically
- 3) Communicate effectively
- 4) Apply information tools and resources
- 5) Develop cultural awareness
- 6) Master program learning objectives

This is the intended schedule for the class. Topics listed each day are the sections that are planned to be discussed in class on that day. It is not unusual to be two or three days ahead or behind this schedule, but we will cover the material in this order.

Note: 47 instructional days, 2 review days, 2 holidays, midterm and final exam.

Monday	Tuesday	Wednesday	Thursday	Friday

		Sept 24 2014 (Start of Quarter) Read Chap 6 Integration: Working Backwards Indefinite Integral	25 Constant of Integration	26 Integration method: The easy ones More Easy Integration
29	30	Oct 1 Integration Method: Eyeball Technique	2 Integration Method: Tables	3 Integration Method: Computers & Calculators
6	7	8	9	10
Read Chap 5 The Definite Integral	Area	Area Between Curves	Fundamental Theorem of Calculus Part I	Fundamental Theorem of Calculus Part II
13	14	15	16	17
Some Rules of Definite Integration	Integration Method: Numerical Approximation	Faculty Development day/Student study day No Classes	Integration Method: Numerical Approximation Cont.	Integration Method: Numerical Approximation cont.
20	21	22	23	24
Review Exponents & Logs	Important Features of Exponents & Logs Solving Problems	Differentiating e^x and its friends Integrating e^x and its friends	Differentiating the Natural log	Working with other Bases

27 Midterm Exam	28 Integrals and the natural log	29 Logarithmic Differentiation: Making hard stuff Easy	30 Exponential Growth and Decay	31 Integration method: Integration by parts
Nov 3 Integration method: Trigonometric Substitution	4 Integration method: Partial Fractions	5 Intermediate Forms Improper Integrals	6 Areas and Volumes	7 Applications to Geometry
10 Area and Arc Length in Polar Coordinates	11 Veterans Day No Classes	12 Density and Center of Mass	13 Applications in Physics	14 Applications to Economics
17 Distribution Function	18 Probability, Mean Median	19 What is a Differential Equation	20 Slope Field	21 Euler's Method
24 Separation of Variables	25 Growth & Decay	26 Thanksgiving Recess No classes	27 Thanksgiving Recess No classes	28 Thanksgiving Recess No classes
Dec 1 Application & Modeling	2 Application & Modeling cont.	3 The Logistic Method	4 Systems of Differential Equation	5 Classes End, Last day of Instruction Analyzing the Phase Plane
6	7	8 FINAL EXAMS	9 FINAL EXAMS	10 FINAL EXAMS
11 FINAL EXAMS	12	13	14	15
16 Grades Due 10:00pm deadline				

ASSESSMENT METHODS AND GRADING SCALE

Your grade will be based on the following:

Homework 25%

Midterm 37.5%

Final exam 37.5%

The grading scale follows:

Decimal	Percent age %	Decimal	Percent age %	Decimal	Percent age %
4	95	2.8	83	1.6	71
3.9	94	2.7	82	1.5	70
3.8	93	2.6	81	1.4	69
3.7	92	2.5	80	1.3	68
3.6	91	2.4	79	1.2	67
3.5	90	2.3	78	1.1	66
3.4	89	2.2	77	1	65
3.3	88	2.1	76	0	<64
3.2	87	2	75		
3.1	86	1.9	74		
3	85	1.8	73		
2.9	84	1.7	72		

Attendance policy: You can attend or not attend at your own discretion. However, If you don't attend, you will not be able to pass the module test. **You will be responsible to turn in homework when due, and take exams on time.** Only if you have a pre-approved absence, or documented family/medical emergency will you be allowed to make up the work.

ACADEMIC HONESTY

As members of the Central Washington University learning community, students are not to engage in any form of academic dishonesty. Forms of academic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, grade tampering, and misuse of computers and other electronic technology. Students who engage in academic dishonesty may receive an academic penalty or a disciplinary penalty or both. The disciplinary consequences of engaging in any form of academic dishonesty include reprimand, probation, suspension, and dismissal. A student who knowingly helps or attempts to help another individual to violate the University's policy on academic honesty also may be subject to academic as well as disciplinary penalties.

STUDENTS REQUIRING SPECIAL ACCOMMODATION

Central Washington University provides reasonable accommodations to students with disabilities. Students who need course accommodations because of a disability, have emergency medical information, or need special arrangements in case the building must be evacuated, should notify their instructors as soon as possible.